

NU-01013

**AFTER FINAL: EXPEDITED ACTION**

01300045aa

Amendment dated 06/16/2005

Reply to office action mailed 04/15/2005

The following is a complete listing of all claims in the application, with an indication of the status of each:

**Listing of claims:**

1           1. (currently amended) A CDMA (Code Division Multiple Access)  
2           transmitter/receiver comprising:  
3                     SIR (Signal-to-Interference Ratio) calculating means for calculating  
4           SIRs of a received signal slot by slot; and  
5                     command generating means for generating a transmission power  
6           control command and a transmission power control-OFF command ~~for~~  
7           ~~interrupting a transmission power control,~~  
8                     said transmission power control ~~generating~~ command being  
9                     generated when the SIR decreases or increases from a reference value,  
10           ~~a said~~ transmission power control command being a command that  
11           causes a station, which is sending the received signal, to lower or raise  
12           transmission power so as to restore the SIR toward the reference value,  
13                     said transmission power control-OFF command for interrupting  
14           a transmission power control being generated when the SIR  
15           continuously decreases over a preselected number of slots;  
16           wherein said transmission power control-OFF command, if generated,  
17           is inserted in a radio frame to be sent to the station, otherwise said  
18           transmission power control command is inserted in said radio frame.

1           2. (previously presented) The CDMA transmitter/receiver as claimed in  
2           claim 1, wherein said command generating means comprises:  
3                     transmission power control command generating means for generating  
4           said transmission power control command by determining whether or not a

5 difference between the SIR of a current slot and a reference SIR is equal to or  
6 greater than zero;  
7 command select signal generating means for counting slots over which  
8 a difference between the SIR of an immediately preceding slot and the SIR of  
9 the current slot is equal to or greater than a preselected threshold assigned to  
10 SIRs, and generating a command select signal having a particular status in  
11 each of  
12 a) a case wherein said difference is smaller than said  
13 preselected threshold assigned to SIRs or a number of slots counted is  
14 smaller than a preselected threshold assigned to slots and  
15 b) a case wherein said difference is equal to or greater than said  
16 threshold and said number of slots counted is equal to or greater than  
17 said threshold assigned to slots; and  
18 a selector for selecting either one of said transmission power control  
19 command and said transmission power control-OFF command in accordance  
20 with said command select signal.

1 3. (original) The CDMA transmitter/receiver as claimed in claim 2, wherein  
2 said transmission power control-OFF command comprises a transmission  
3 power control command for lowering the transmission power and a  
4 transmission power control command for raising said transmission power that  
5 alternate with each other slot by slot.

1 4. (currently amended) The CDMA transmitter/receiver as claimed in claim  
2 2, wherein said command select signal generating means comprises:  
3 SIR storing means for storing the SIR of the current slot while  
4 outputting the SIR of the immediately preceding slot;

5 subtracting means for subtracting the SIR of the current slot from the  
6 SIR of the immediately preceding slot; and  
7 counter means for counting the number of slots over which a  
8 difference output from said subtracting means is equal to or greater than the  
9 preselected threshold assigned to SIRs;  
10 wherein said command select signal has a particular status in each of  
11 a) a case wherein the ~~different~~ difference output from said  
12 subtracting means is smaller than the preselected threshold assigned to  
13 SIRs or the number of slots counted is smaller than the preselected  
14 threshold assigned to slots and  
15 b) a case wherein said difference output from said subtracting  
16 means is equal to or greater than said preselected SIR threshold and  
17 said number of slots counted is equal to or greater than said preselected  
18 threshold assigned to slots.

1 5. (original) The CDMA transmitter/receiver as claimed in claim 4, wherein  
2 said transmission power control-OFF command comprises a transmission  
3 power control command for lowering the transmission power and a  
4 transmission power control command for raising said transmission power that  
5 alternate with each other slot by slot.

1 6. (previously presented) The CDMA transmitter/receiver as claimed in  
2 claim 1, wherein said command generating means comprises:  
3 transmission power control command generating means for generating  
4 said transmission power control command by determining whether or not a  
5 difference between the SIR of a current slot and a reference SIR is equal to or  
6 greater than zero;

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7           command select signal generating means for counting slots over which  
8           a difference between the SIR of the current slot and a reference SIR is equal to  
9           or greater than a preselected threshold assigned to SIRs, and generating a  
10          command select signal having a particular status in each of

11                   a) a case wherein said difference is smaller than said  
12           preselected threshold assigned to SIRs or a number of slots counted is  
13           smaller than a preselected threshold assigned to slots and  
14                   b) a case wherein said difference is equal to or greater than said  
15           threshold and said number of slots counted is equal to or greater than  
16           said preselected threshold; and  
17          a selector for selecting either one of said transmission power control  
18          command and said transmission power control-OFF command in accordance  
19          with said command select signal.

1          7. (original) The CDMA transmitter/receiver as claimed in claim 6, wherein  
2          said transmission power control-OFF command comprises a transmission  
3          power control command for lowering the transmission power and a  
4          transmission power control command for raising said transmission power that  
5          alternate with each other slot by slot.

1          8. (previously presented) The CDMA transmitter/receiver as claimed in  
2          claim 6, wherein said command select signal generating means comprises:  
3                  subtracting means for subtracting the SIR of the current slot from a  
4          reference SIR; and  
5                  counter means for counting slots over which a difference output from  
6          said subtracting means is equal to or greater than the preselected SIR  
7          threshold;  
8          wherein said command select signal has a particular status in each of

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- 9                   a) a case wherein the difference output from said subtracting  
10                   means is smaller than the preselected threshold assigned to SIRs or the  
11                   number of slots counted is smaller than the preselected threshold  
12                   assigned to slots and  
13                   b) a case wherein said difference output from said subtracting  
14                   means is equal to or greater than said threshold assigned to SIRs and  
15                   said number of slots counted is equal to or greater than said preselected  
16                   threshold assigned to slots.

1           9. (original) The CDMA transmitter/receiver as claimed in claim 8, wherein  
2           said transmission power control-OFF command comprises a transmission  
3           power control command for lowering the transmission power and a  
4           transmission power control command for raising said transmission power that  
5           alternate with each other slot by slot.

1           10. (previously presented) The CDMA transmitter/receiver as claimed in  
2           claim 1, wherein said command generating means comprises:  
3                   transmission power control command generating means for generating  
4                   said transmission power control command by determining whether or not a  
5                   difference between the SIR of a current slot and a reference SIR is equal to or  
6                   greater than zero;  
7                   command select signal generating means for counting slots over which  
8                   a difference between the SIR of an immediately preceding slot and the SIR of  
9                   the current slot is equal to or greater than zero, and generating a command  
10                  select signal having a particular status in each of  
11                  a) a case wherein said difference is smaller than a preselected  
12                  threshold assigned to SIRs or a number of slots counted is smaller than  
13                  a preselected threshold assigned to slots and

14                   b) a case wherein said difference is equal to or greater than zero  
15                   and said number of slots counted is equal to or greater than said  
16                   preselected threshold assigned to slots; and  
17                   a selector for selecting either one of said transmission power control  
18                   command and said transmission power control-OFF command in accordance  
19                   with said command select signal.

1           11. (original) The CDMA transmitter/receiver as claimed in claim 10,  
2           wherein said transmission power control-OFF command comprises a  
3           transmission power control command for lowering the transmission power and  
4           a transmission power control command for raising said transmission power  
5           that alternate with each other slot by slot.

1           12. (previously presented) The CDMA transmitter/receiver as claimed in  
2           claim 11, wherein said command select signal generating means comprising:  
3                   SIR storing means for storing the SIR of the current slot while  
4                   outputting the SIR of the immediately preceding slot;  
5                   subtracting means for subtracting the SIR of the current slot from the  
6                   SIR of the immediately preceding slot; and  
7                   counter means for counting the number of slots over which a  
8                   difference output from said subtracting means is greater than or equal to zero;  
9                   wherein said command select signal has a particular status in each of  
10                   a) a case wherein the different output from said subtracting  
11                   means is smaller than zero or the number of slots counted is smaller  
12                   than the preselected threshold assigned to slots and  
13                   b) a case wherein said difference output from said subtracting  
14                   means is equal to or greater than zero and said number of slots counted  
15                   is equal to or greater than said preselected threshold assigned to slots.

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1        13. (original) The CDMA transmitter/receiver as claimed in claim 12,  
2        wherein said transmission power control-OFF command comprises a  
3        transmission power control command for lowering the transmission power and  
4        a transmission power control command for raising said transmission power  
5        that alternate with each other slot by slot.

1        14. (original) The CDMA transmitter/receiver as claimed in claim 1, wherein  
2        said transmission power control-OFF command comprises a transmission  
3        power control command for lowering the transmission power and a  
4        transmission power control command for raising said transmission power that  
5        alternate with each other slot by slot.

1        15. (currently amended) A CDMA transmitter/receiver comprising:  
2                a SIR calculator configured to calculate SIRs of a received signal slot  
3        by slot; and  
4                a command generating circuit configured to generate a transmission  
5        power control command and a transmission power control-OFF command ~~for~~  
6        ~~interrupting transmission power control,~~  
7                said transmission power control command being ~~configured to~~  
8        ~~generate, generated~~ when the SIR decreases or increases from a  
9        reference value, a said transmission power control command being a  
10        command that causes a station, which is sending the received signal, to  
11        lower or raise transmission power so as to restore the SIR toward the  
12        reference value,  
13                said transmission power control-OFF command for interrupting  
14        a transmission power control being generated when the SIR  
15        continuously decreases over a preselected number of slots;

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- 16                wherein said transmission power control-OFF command, if generated,  
17                is inserted in a radio frame to be sent to the station, otherwise said  
18                transmission power control command is inserted in said radio frame.